## NATURAL HISTORY MISCELLANEA

## Published by

## The Chicago Academy of Sciences

Lincoln Park - 2001 N. Clark St., Chicago 14, Illinois

No. 110 September 5, 1952

## A New White-anthered Hawthorn of the Chicago Region

Kendall Laughlin\*

Crataegus leucantha sp. nov.

A much branched tree up to 6 m. in height with a stem 10 cm. in diameter. Bark originally smooth, cinereous, with occasional coarse horizontal lenticels, becoming vertically fissured on stems more than 4.5 cm. in diameter. Branchlets glabrous, lustrous red in their first year, becoming dull cinereous in their third and fourth years. Spines on branches slender, nearly straight, simple, 3-4.5 cm. long, lustrous reddish-brown; spines on old trunks 8.5 cm. long, compound.

Leaves elliptic or obovate, gradually narrowed to the entire base, usually acute sometimes obtuse at the apex, irregularly and coarsely serrate, 5-8.5 cm. long, 3-5.5 cm. wide, with a broad yellow midrib and 4-7 pairs of primary veins deeply impressed above, terminating in short lobes. Mature leaves of two types in texture and pubescence: (1) thick, dark green, glabrous and rather lustrous above, often crispate at the edges, pale, glabrous and reticulate-venulose beneath; or (2) thin, glabrous and dull yellow-green above, flattish, pale and puberulent beneath.

Petioles glabrous, 1.3-2.5 cm. long, grooved above.

Flowers opening about May 20, 1.6-1.9 cm. wide, in (18-) 26- or 27-flowered villose corymbs.

Twenty stamens with small white anthers.

Usually 2 pistils, very close together, often 1, rarely 3 with two bifid stigmas on one style.

Calyx-lobes glandular-serrate.

Fruit ripening in late September and October in erect clusters, subglobose, 8-10 mm. long, 9-11 mm. wide, lustrous scarlet, with an elongated calyxtube with occasional appressed calyx-lobes persistent on the ripe fruit; flesh edible and slightly acid.

\*4114 W. Washington Blvd., Chicage 24, Ill.

Nutlets 1-3, with irregularly shaped longitudinal cavities on their ventral faces where multiple, 6-8 mm. long, 5-7.5 mm. wide, broadly and shallowly grooved on the back.

Arbor ramosa 6 m. alta, trunco 10 cm. d-iametro. Cortex primum laevis cinereus interdum lenticellis crassis libratis, faciendus fissus verticaliter in truncis ultra 4.5 cm. diametro. Ramuli glabri, lucidi rubri annis juvenalibus, faciendi hebetes cinerei annis vetustioribus. Spinae in ramis graciles, prope rectae, simplices, 3-4.5 cm. longae, lucidae rufo-brunneae; spinae in truncis veteribus 8.5 cm. longae, compositae.

Folia elliptica aut obovata, ad basim integram gradatim angustata, plerumque acuta interdum obtusa apice, inaequaliter crasseque serrata, **5-8.5** cm. longa, **3-5.5** cm. lata, costa media flava et nervis lateralibus principalibus utroque latere **4-7** valde impressis supra in lobis brevibus terminantibus. Folia matura diversa: (1) crassa atroviridia glabra lucidioraque supra saepe crispa marginibus, pallida, glabra et reticulato-venulosa subtus; aut (2) tenuia glabra et hebetia luteo-viridia supra, planiuscula pallida puberulentiaque subtus.

Petioli glabri, 1.3-2.5 cm. longi, supra canaliculati.

Flores in anthesi circa **20** Maius, 1.6-1.9 cm. lati, corymbis villosis (**18-) 26-** vel 27-floridis; staminibus **20** antheris parvis albis; pistillis plerumque duobus confertissimis, saepe uno, raro tribus stigmatibus duobus bifidis in uno stylo; calycis lobis glandulari-serratis.

Fructus maturescens sero Septembri et Octobri corymbis erectis, subglobosus, 8-10 mm. longus, 9-11 mm. latus, lucidus coccineus, tubulo calycis praelongo interdum lobis calycis adpressis pertinacibus in fructu maturo; carni esculenta acidulaque; nuculis 1-3, fossis longitudinalibus diversiformibus in faciebus ventralibus ubi plures quam una, 6-8 mm. longis, 5-7.5 mm. latis, in dorso late leviterque striatis.

With its many flowered corymbs of pure white flowers, this species is perhaps the most showy hawthorn of the Chicago region.

This newly discovered species, belonging to the *Macracanthae* group of the genus, is distinguished from *Crataegus gemmosa* Sarg. (= C. *succulenta* Link) by its lighter-colored leaves and smaller spines. It is distinguished from C. *calpodendron* (Ehrh.) Medic. by its glabrous branchlets and petioles. It is distinguished from all other arborescent species of the *Macracanthae* group by the invariably white anthers of its flowers and the frequently one-seeded fruits. Of 20 fruits picked up beneath one tree, 14 had 2 nutlets, 3 had 3 nutlets and 3 had 1 nutlet.

I have collected specimens in the Miami and Glenview Memorial Woods of the Cook County Forest Preserves. The known range of this species therefore extends along both sides of the North Branch of the Chicago River from Oakton Street to Lake Avenue.

Specimen material has been placed in the herbaria of the Chicago Academy of Sciences and the Chicago Natural History Museum.

I am indebted to Dr. Julian A. Steyermark of the Chicago Natural History Museum for his painstaking review of the Latin diagnosis.

Natural History Miscellanea, a series of miscellaneous papers more or less technical in nature, was initiated by The Chicago Academy of Sciences in 1946 as an outlet for short, original articles in any field of natural history. It is edited by the Director of the Academy with assistance from the Scientific Governors' Committee on Publications and other qualified specialists. Individual issues, published at irregular intervals, are numbered separately and represent only one field of specialization; e.g., botany, geology, entomology, herpetology, etc. The series is distributed to libraries and scientific organizations with which the Academy maintains exchanges. Title pages and indexes are supplied to these institutions when a sufficient number of pages to form a volume have been printed. Individual specialists with whom the Academy or the various authors maintain exchanges receive those numbers dealing with their particular fields of interest. A reserve is set aside for future exchanges and a supply of each number is available for sale at a nominal price. Authors may obtain copies for their personal use at the prevailing rates for similar reprints.

When citing this series in bibliographies and in preparing abstracts, authors are requested to use the following preferred abbreviations: Chicago Acad. Sci., Nat. Hist. Misc.

H. K. Glcyd, Director

Committee on Publications:

Alfred Emerson, Hanford Tiffany, and C. L. Turner.